



**MCA VIDEO DISC PLAYER
MODEL PR-7820**

SERVICE MANUAL SUPPLEMENT 1



- The circuitry and optical system in the PR-7820 have been changed.
- Circuit changes involve the FOCS, STPM, VTBC, and SPDL circuits.
- Optical system changes involve the cylindrical lens assembly (multiple prism assembly) and the photo detector assembly.
- In addition, optical system adjustments and general adjustments have been modified according to the above changes.

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1. GENERAL ADJUSTMENTS

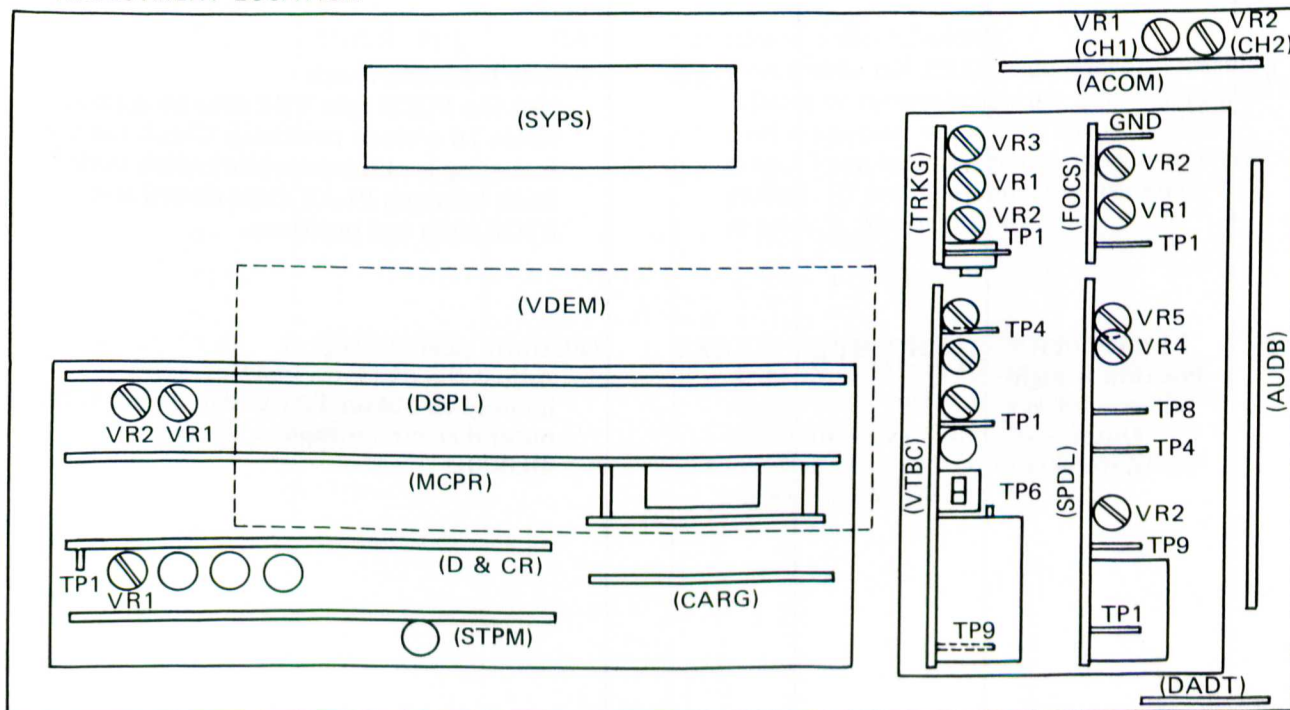
Check the following points prior to commencing a general adjustment of the PR-7820.

1. Check all power supply voltages, and the positions of all microswitches. Also check resistance ($150 \pm 50\Omega$) at CARG. POT. end position.
2. Preset the DSPL VR1 & 2 (Anticipate Outside & Inside). (Turn VR1 clockwise and VR2 counter-clockwise to max position).
3. Check FFMP operation (focus motor lens up by power switch ON $\leftrightarrow$ OFF during "battery support").
4. Check that the SYNC selector switch is in the INT position, the VTBC loop switch in the O/L position, and the TRKG loop switch in the C/L position.
5. All discs used should be UPC test discs (CAV, CLV, and program dumping).
6. Although the μ -com is used, operate in service mode until completion of platform adjustments.

NOTES:

1. Since LENS UP & DOWN can also be operated manually, immediately move the lens up (stop/push operations) if proper focus is not attained).
2. When the PARK or END position is reached during SCAN FWD & REV MODE, release the button immediately.

ADJUSTMENT LOCATION

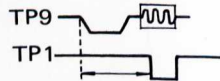
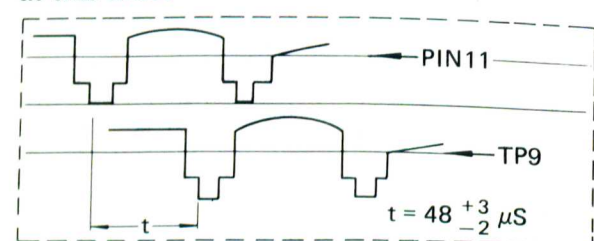


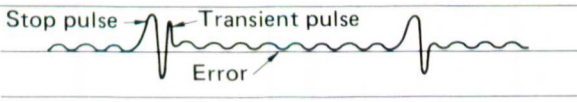
STEP NO.	Adjustment circuit board (and VR No.) or name of adjustment position.	TP NO.	Disc and conditions	Adjustment and check details
1	TRKG VR3		CAV	Set μ -com to service mode (& RAM CLEAR) Turn power switch on while pressing the RAM CLEAR switch.
2			CAV	Spindle running check Confirm the Spindle running when the SEARCH button is pressed, and Spindle stop when the AUTO STOP button is pressed.
3			CAV	Carriage operation check Switch back and forth between PARK and END position by SCAN FWD and SCAN REV. modes, and check for normal carriage transport speed.
4			CAV	TRKG. mirror bias check Check that the voltage of TRKG. mirror drive position, is a $0V \pm 0.1V$ (readjusting VR3 at TRKG O/L if necessary).
5			CAV	Proper focussing check (Set the FOCS gain VR2 into an approximate 10 o'clock position). Check the proper focussing is obtained while switch back and forth between PLAY (lens down) and STOP (lens up) positions.
6	PLATFORM Position Rough adjustment at Outer circumference	TRKG: TP1	CAV	Platform position adj.—1 Adjust the platform position approximately to obtain TRKG signal max at the outer disc circumference (frame no. 40,000).

STEP NO.	Adjustment circuit board (and VR No.) or name of adjustment position.	TP NO.	Disc and conditions	Adjustment and check details
7	FOCS: VR1	TRKG: TP1	CAV	Platform position adj.—2 Adjust FOCS offset VR1 to obtain TRKG signal max.
8	PLATFORM back and forth position adjustment	TRKG: TP1	CAV	Platform position adj.—3 After shifting DISC to inside circumference (frame no. 100), fine adjust the platform back and forth position; and set temporarily at the TRKG signal max position.
9	GRATING	TRKG: TP1	CAV	Grating adjustment Shift disc to frame no 10,000, and turn the grating adjustment screw clockwise. Check positioning above the same track as the main beam with the waveform at the first TRACK signal min position. Then turn counter-clockwise, and temporarily set at TRKG signal max. Also check TRKG signal max at both frame no. 100 and 40,000.
10		TRKG: TP1	CAV	Platform position setting Check that the TRKG signal level difference between the disc outer and inner circumferences lies within the 0 ~ -4dB range. Then lock the platform set screw and grating. (If readjustment is considered necessary, repeat step 8).
11	TRKG: VR1	TRKG: TP1	CAV	TRKG O/L signal AC offset adjustment Adjust the TRKG signal waveform AC center to 0V at the disc outer circumference (frame no. 40,000). (The positive and negative peak values should be equal in respect to 0V DC).

STEP NO.	Adjustment circuit board (and VR No.) or name of adjustment position.	TP NO.	Disc and conditions	Adjustment and check details
12	FOCS: VR1	FOCS: TP1	CAV	Check FOCS Offset Voltage at TRKG O/L Signal Max. Push AUDIO—2 [TRAK C/L] at approximately disc frame no. 100, and read off the FOCS offset voltage (V_T). (Spec. rating: within $0V \pm 0.8V$).
13	VDEM VR1 VR5		CAV F/N #100	VDEM DOS Sensitivity adjustment Stop at the innermost disc track (approx. no. 100). Turn VR1 counter-clockwise, and stop when a large number of drop-outs appear on the screen. Adjust (and then lock) VR5 to the position of minimum drop-outs on the screen. Turn VR1 clockwise as far as it will go, and lock it in that position after checking that screen drop-outs have been covered.
14	FOCS: VR1 & RF. TP. point	FOCS: TP1 & RF. TP.	CAV CLV	FOCS Offset Voltage (F/N #100) Rotate VR1 in both directions, and read off the voltages $V_{T(-)}$ & $V_{T(+)}$ where drop-outs start to appear (at about the same drop-out level). The setting voltage V_T will then be about halfway between these 2 voltages. Also turn VR1 to obtain RF max., and read off the RF level (E_{RM}) at that time. The RF level at the V_T setting will become E_{RT} . Spec. rating: $V_T \leq 0.8V$ $E_{RT}/E_{RM} > 0.85$ (Note that this may be varied by up to $\pm 0.3V$ in order to obtain a smoother envelope in the vicinity of CLV [Animal House] 50:00).
15	FOCS: VR1	FOCS: TP1	CAV	Check Voltage Difference Between RF Max. and TRKG Max. FOCS Offset Voltages After checking that the difference between V_T and the TRKG error max. offset voltage lies within the $\pm 0.7V$ range, set the offset voltage to V_T .
16	TRKG: VR2	TRKG: TP1	CAV	Approximate TRKG gain adjustment Push AUDIO—2 (TRKG C/L) and adjust to obtain TRKG error min, checking that there is no oscillation at the innermost circumference. (Note that approximate adjustment only is required at this stage).
17	FOCS: VR2	FOCS: TP1	F/N #45000	FOCS gain adjustment Adjust VR2 to obtain FOCS error min at the outer disc circumference (frame no. 45,000), but checking that the gain is not increased too far.

STEP NO.	Adjustment circuit board (and VR No.) or name of adjustment position.	TP NO.	Disc and conditions	Adjustment and check details
18			F/N #100	Proper focussing and TRKG O/C check Switch back and forth between PLAY (lens down) and STOP (lens up) positions several times at the inside disc circumference (frame no. 100) to check for normal operation. Then switch back and forth between AUDIO—2 (TRKG C/L) and AUDIO—1 (TRKG O/L) several times, again to check for normal operation.
19	SPDL: VR1	Stroboscope	CLV	SPDL free run speed adjustment Adjust to about 1750 ± 50 rpm at the PARK position during μ -com service mode. Note, however, that the final specification is 1800 ± 200 rpm.
20			CLV	Set μ -com to normal mode Turn power switch off and on, and then press PLAY.
21	SPDL: VR4	SPDL: TP8	CLV	SPDL H-error offset adj.—1 Monitor the H-error, and adjust the center of the 30Hz AC component to 0V (approximate adjustment). Then check SPDL lock from the waveform.
22	SPDL: VR3 VR4	SPDL: TP8 TP11	CAV	SPDL tacho offset adj. & H-error offset adj.—2 Adjust the tacho error offset VR3 slowly to -0.5 V, and confirm H-lock while repeating REJECT and PLAY. If H-lock is not obtained, adjust H-error offset VR4, until H-lock is obtained. If H-lock is obtained at -0.5 V of tacho error offset voltage, adjust VR3 to $+1.25$ V and confirm H-lock as same as above. Then readjust VR3 to obtain 0V on TP11.
			CLV	Confirm H-lock while repeating REJECT and PLAY. (at 7kHz eccentricity)

STEP NO.	Adjustment circuit board (and VR No.) or name of adjustment position.	TP NO.	Disc and conditions	Adjustment and check details
23	VTBC VR1 VR2	VTBC TP1 TP2	CAV F/N #100	Burst gate timing adjustment Set the VTBC loop O/C switch to the O/L position (VWW-003). *1. Turn VR1, and adjust the burst gate pulse negative going edge delay to $6 \pm 0.2 \mu\text{sec}$ from the SYNC tip negative edge.  Then turn VR2 and adjust pulse width to $0.7 \pm 0.1 \mu\text{sec}$.  *1: VWW-005 (new VTBC) doesn't have this switch, so set the VTBC loop to open by connecting a wire between TP11 and TP12.
24	VTBC VR4	TP4	CAV F/N #100	Error offset adjustment Adjust the AC center to 0V ($0 \pm 0.2\text{V}$), and set the O/C switch to C/L.
25	VTBC VR10	Line out	CAV #2000 ~ #3500	Video level adjustment Adjust to $1\text{V} \pm 0.1\text{V}$ (after first checking that the input level at PIN11 of the circuit board connector is $1\text{V} \pm 0.1\text{V}$).
26	VTBC VR5 VR6 VR7	TP4 TP6 TP9 PIN11	CAV ($80 \mu\text{m}$ eccentricity)	H-error injection level adjustment Minimize the stepwise difference generated in the TP6 error waveform during PLAY mode at an inner disc circumference (below frame no. 1,000).  Adjust the amount of delay between PIN11 and TP9 to $48 \mu\text{sec}$ ($+3, -2 \mu\text{sec}$) by means of VR6 (C/L) and VR7 (O/L), and then set to O/L. PIN11 should be used for triggering at this time. 

STEP NO.	Adjustment circuit board (and VR No.) or name of adjustment position.	TP NO.	Disc and conditions	Adjustment and check details
27	VTBC	TP8 VR3	CAV (80 μ m eccentricity)	DC Drift Cancellation Adjustment Adjust VR3 to minimize the DC drift in the TP8 video signal when in stop mode at an inside disc track (no higher than frame no. 1000).
28	SPDL VR2	VTBC: TP9 SPDL: TP1	CAV	SPDL H-sync phase adjustment Align the positive going edge of the SPDL TP1 square waveform with the negative going edge of the VTBC — TP9 playback video H-SYNC. (Specification rating: $\pm 3\mu$ sec).
29	ACOM VR1 (CH1) VR2 (CH2)	AUDIO Line out	F/N #2700~ #1~	ACOM hum suppressor level adjustment Using the test disc CH1 (frame no. 2700) and CH2 (frame no. 1) unrecorded waveforms, adjust the AC level of all AUDIO outputs (particularly the 30Hz component) to minimum positions by means of corresponding VRs).
30	D & CR VR1	TP9	CAV	Valid data adjustment Adjust to the center of the range in which the valid data pulse rises.
31	TRKG VR2	TRKG TP1	F/N #10,000	TRKG Gain Fine Adjustment Reduce the error waveform to a minimum during stop mode at about disc frame no. 10,000. There should be no oscillation waveform at the innermost track. Also check the stop pulse at the inner and outer disc tracks. Note that the transient pulse must not exceed the stop pulse. 

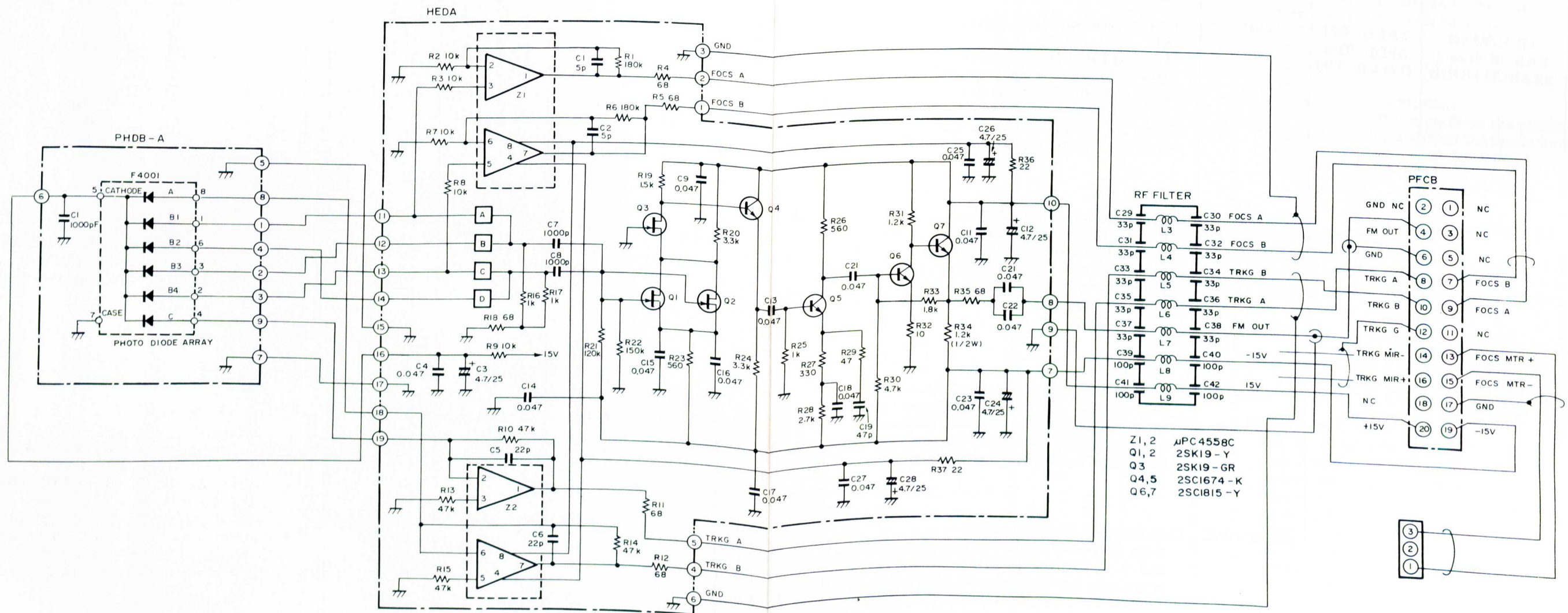
STEP NO.	Adjustment circuit board (and VR No.) or name of adjustment position.	TP No.	Disc and conditions	Adjustment and check details
32			CAV	Inside limit switch position check Set the DSPL VR2 to max position in clockwise direction, and while pressing SCAN REV, pass through frame no. 0, and confirm that the carriage shifts to the center of the disc prior to nearing a mechanical shock noise.
33	DSPL VR2	Monitor	CAV	Anticipate inside adjustment Set to SCAN REV mode from the center of the disc, and adjust so that the frame numbers for carriage speed change from mid to slow will be about 500 ± 150 .
34	DSPL VR1	Monitor	F/N #49130 At above frame no. 49130 (which corresponds to frame no. 54000 when converted to the general disc).	Outside limit adjustment Set to SCAN FWD from the center of the disc, and adjust for switch over to STOP mode at a position a little above frame no. 54000.
35	SPDL	EXT-COMP & Line out	CAV	EXT — LOCK check Set the SYNC switch to EXT, and after applying the external COMP. SYNC and Sub carrier inputs, check that the external COMP. SYNC and LINE OUT frame & H-sync are in phase with each other. (Specification rating approximately $\pm 5\mu\text{sec}$). Also check color lock in monitor. (Also confirm absence of abnormal operation up to COMP SYNC : $2\sim 4\text{Vp-p}$, SC : $250\text{mV} \sim 2\text{Vp-p}$).

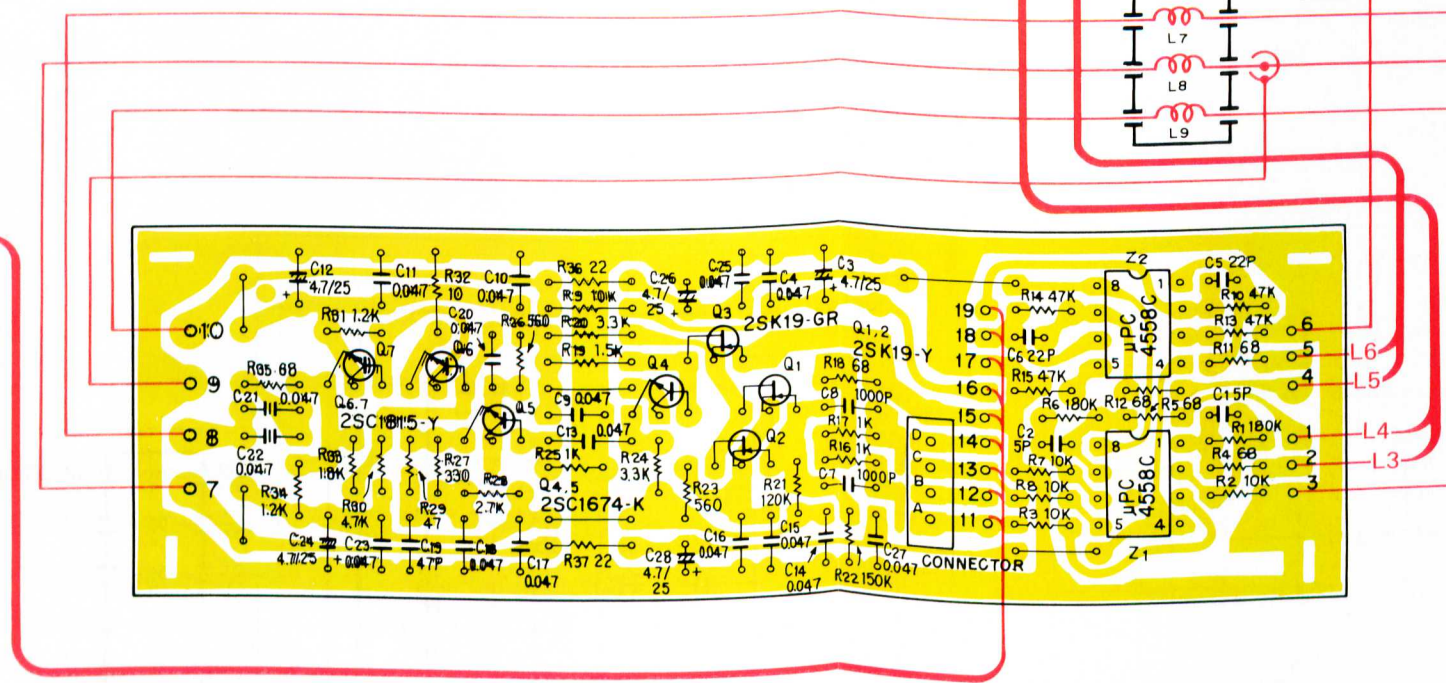
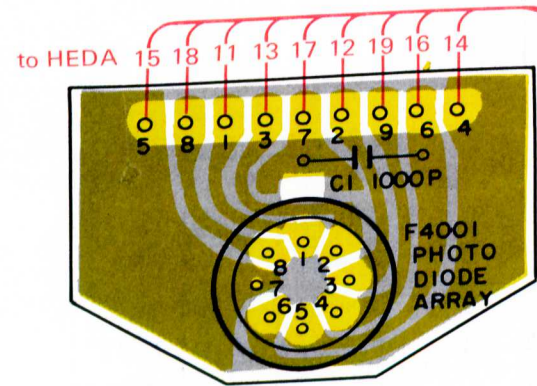
STEP NO.	Adjustment circuit board (and VR No.) or name of adjustment position.	TP NO.	Disc and conditions	Adjustment and check details
36	Check of all CAV functions	TRKG: TP1 SPDL: TP9 D & CR: TP9	CAV	CAV disc function checks Check all CAV disc functions (front panel and remote control switches (especially STEP, SLOW, and SEARCH)).
37	TRACKING ERROR during SEARCH MODE		CAV	Tracking error waveform during SEARCH mode During SEARCH mode covering frame nos. 100 to 40,000, the tracking error depression should be less than -6dB. However, for -5 to -6dB cases, check that there are no SPDL playback sync omissions, and that valid data is normal.
38	CLV DISC check		CLV	Check operation with CLV disc Play a CLV disc and confirm that the color lock and X-P lamps on the monitor light up. (Also check this operation at the outer and inside circumferences, and locking at inside disc circumference by repeating REJ → PLAY several times).
39	SPDL		CLV	SPDL and free run check with CLV disc Play the CLV disc and shut the beam near the outer circumference of the disc (and wait several seconds). Then after infocussing, check that the SPDL — LOCK operates.
40	DATA-DUMPING		DUMP DISC	Data dumping operation check Turn the power switch off, and then on again and check that the AUDIO 1 & 2 indicator lamps light up. Then after PLAY/PUSH, confirm the automatic loading. (Repeat the REJ → PLAY modes several times). Next turn AUDIO—2 off, and confirm normal PLAY by REJ → PLAY operation.

STEP NO.	Adjustment circuit board (and VR No.) or name of adjustment position.	TP NO.	Disc and conditions	Adjustment and check details
41	Miscellaneous			Other check items 1) Picture quality (particularly beat and drop out). 2) VDP ↔ ANT selector switch. 3) Converter output. 5) EXT COMPUTER CONTROL.

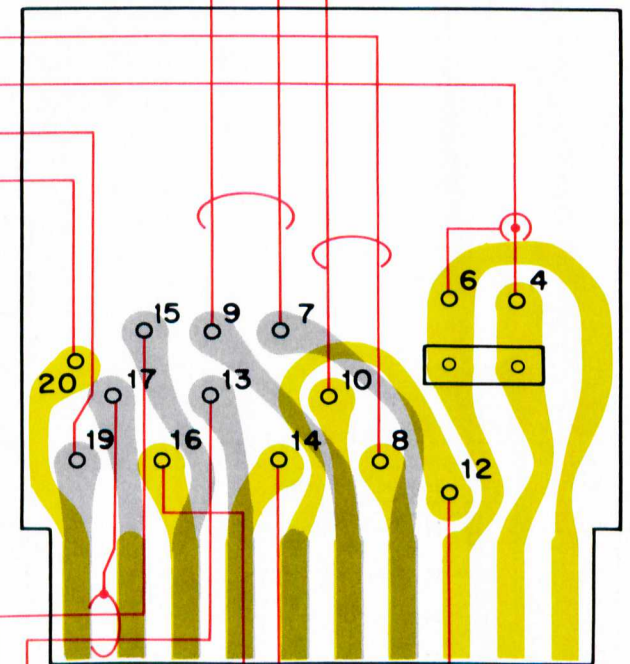
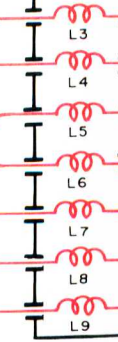
2. SCHEMATIC DIAGRAMS, P.C. BOARD PATTERNS AND PARTS LIST

2.1 HEAD ASSEMBLY (VWW-006) (FOR OPTICAL SYSTEM TYPE 2,3)



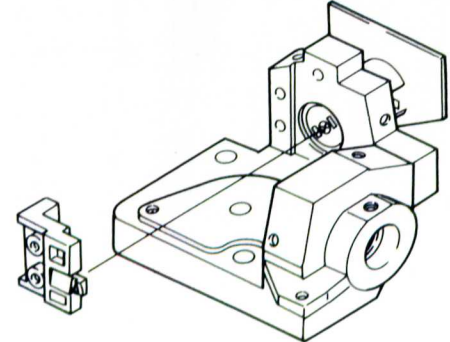


RF FILTER

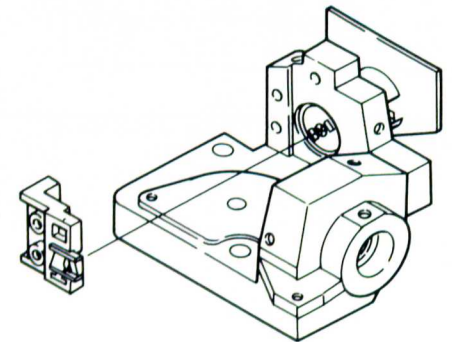


- There are 2 separate types of optical systems based on different shaped multiple prisms.
- Adjustments for Type 2 and Type 3 have been outlined on page 21.

OPTICAL SYSTEM TYPE 2



OPTICAL SYSTEM TYPE 3



Parts List

SEMICONDUCTORS

Part No.	Symbol & Description
μPC4558C	Z1, Z2
2SK19TM-Y	Q1, Q2
2SK19TM-GR	Q3
2SC1674-K	Q4, Q5
2SC1815-Y	Q6, Q7

CAPACITORS

Part No.	Symbol & Description
CEA 4R7P 25	C3, C12, C24, C28
CKDYB 102K 50	C7, C8
CCDSL 220J 50	C5, C6
CCDSL 050C 50	C1, C2
CQSH 470J 50	C19
VCG-003	C4, C9-C11, C13-C18, C20-C23, C25, C27

RESISTORS

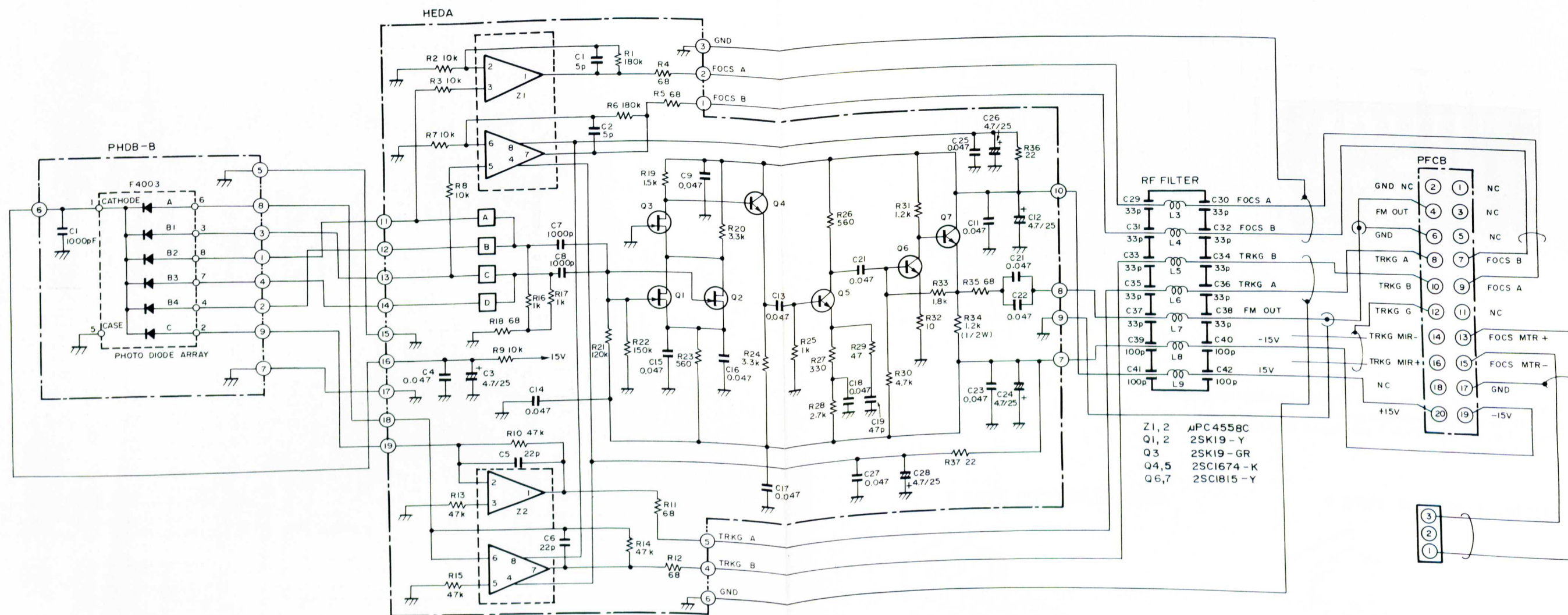
Part No.	Symbol & Description
RD¼VS □□□J	R1-R33, R35-R37
RD½VS □□□J	R34

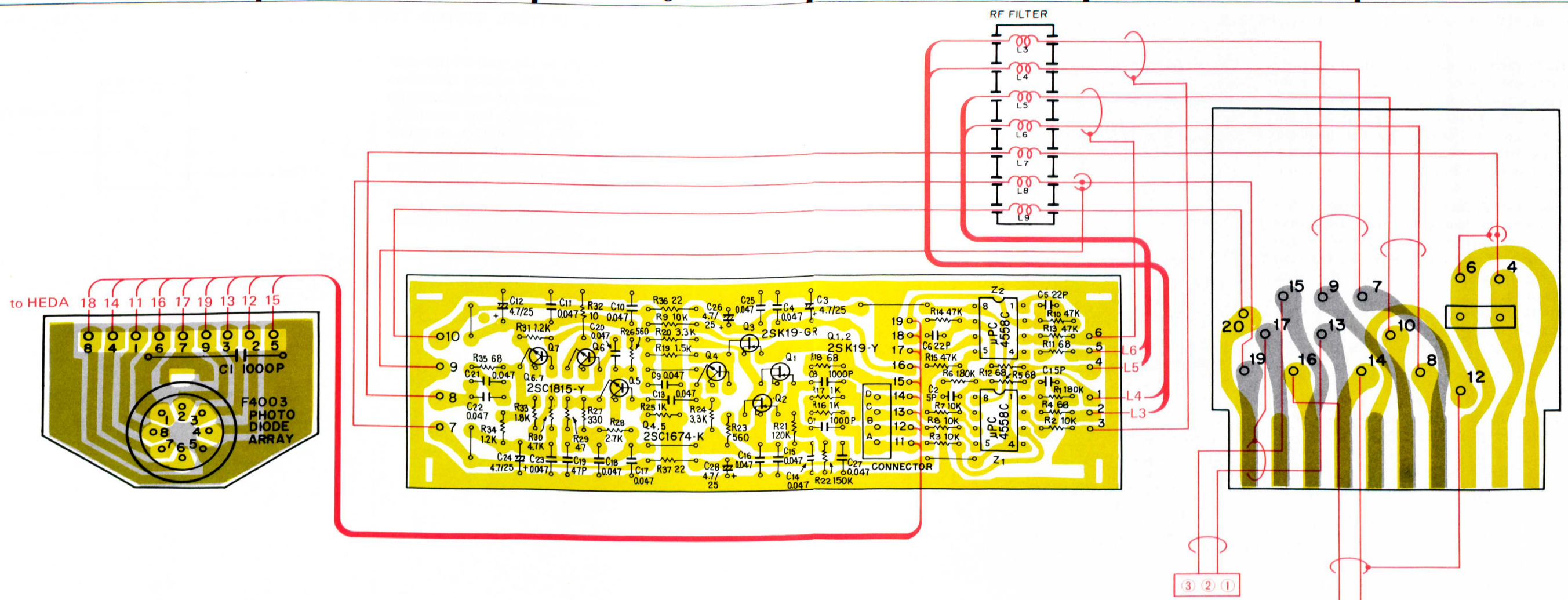
COILS AND TRANSFORMERS

Part No.	Symbol & Description
VTF-011	L3-L9 Filter

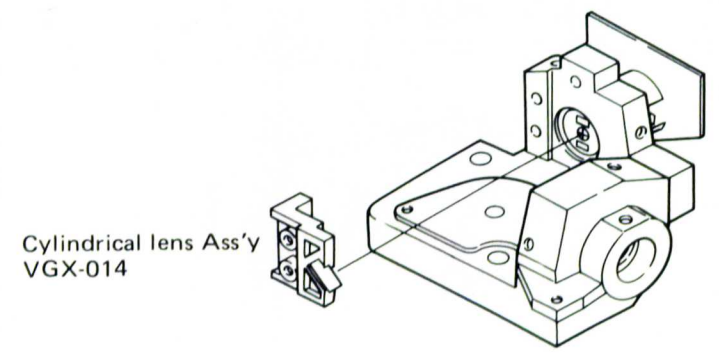
Note: When ordering resistors, convert the resistance value into code form, and then rewrite the part no. as before.

2.2 HEAD ASSEMBLY (VWW-007)
(FOR OPTICAL SYSTEM TYPE 4)





OPTICAL SYSTEM TYPE 4



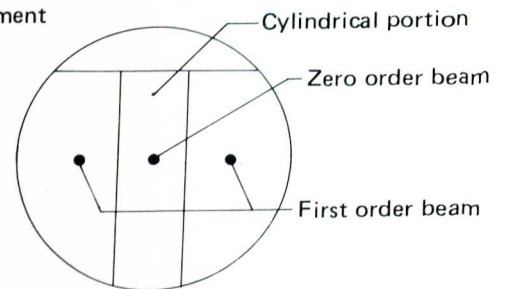
• Adjustments for Type 4 have been described on page 22.

2.3 ADJUSTMENT OF OPTICAL SYSTEM TYPE 2,3

1. Fix the transparent jig onto the wall of the platform, and adjust the height of the movable reflector. Focus the light beam onto the transparent jig before mounting the multiple prism, and mark the position with a few hair lines (or shift the jig to correspond exactly with the height of the beam. → Proceed with the position sensor adjustment.
2. Screw (temporarily) the multiple prism to the optical support, and rotate the prism base until zero light corresponds with the center of the cylindrical portion of the multiple prism (use the tool scope for this adjustment). Secure the prism base in this position.
3. Move the multiple prism ass'y up and down until the 3 points are aligned on the same straight line as shown in fig. 2. Then secure the ass'y in this position.

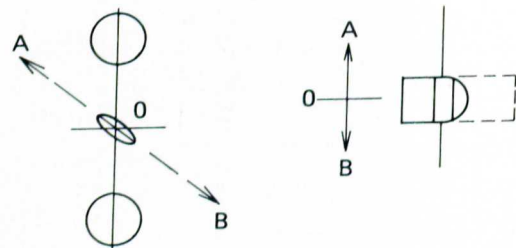
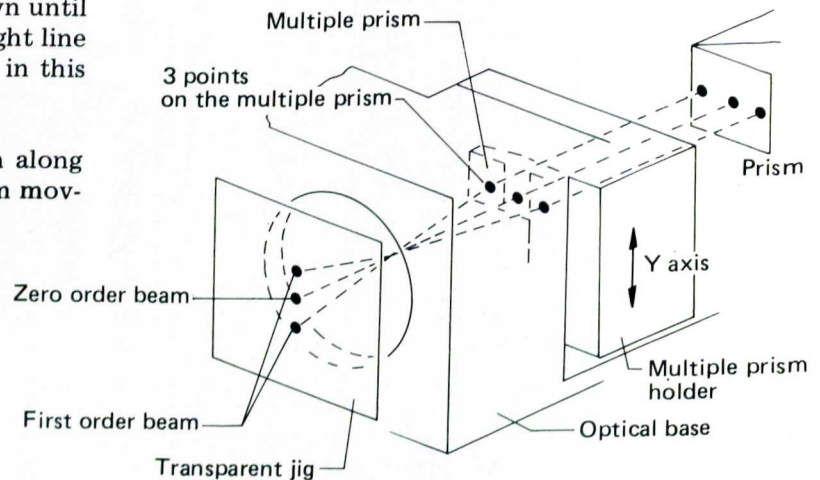
Note that movement of the multiple prism along the Y axis will result in the zero order beam moving diagonally as shown in fig. below.

X Axis Adjustment



A viewed through the tool scope

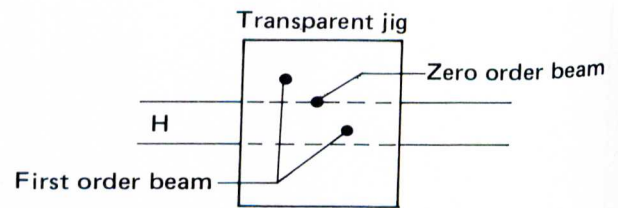
Y Axis Adjustment



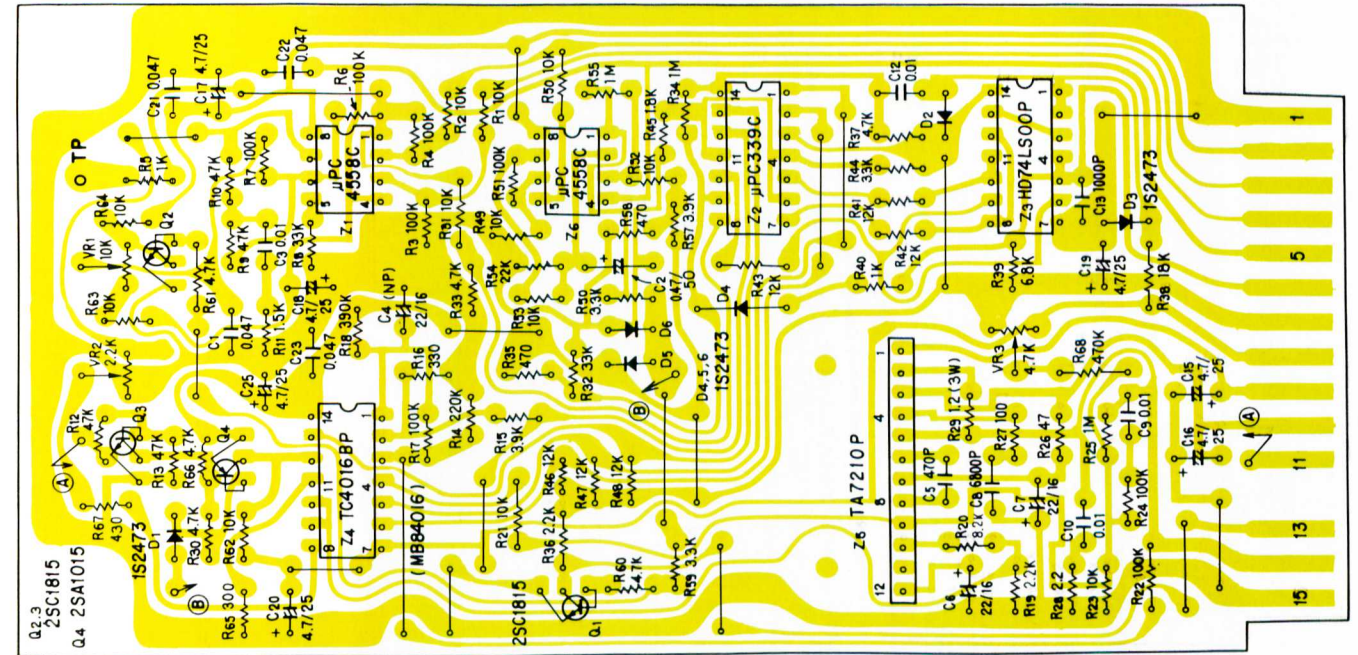
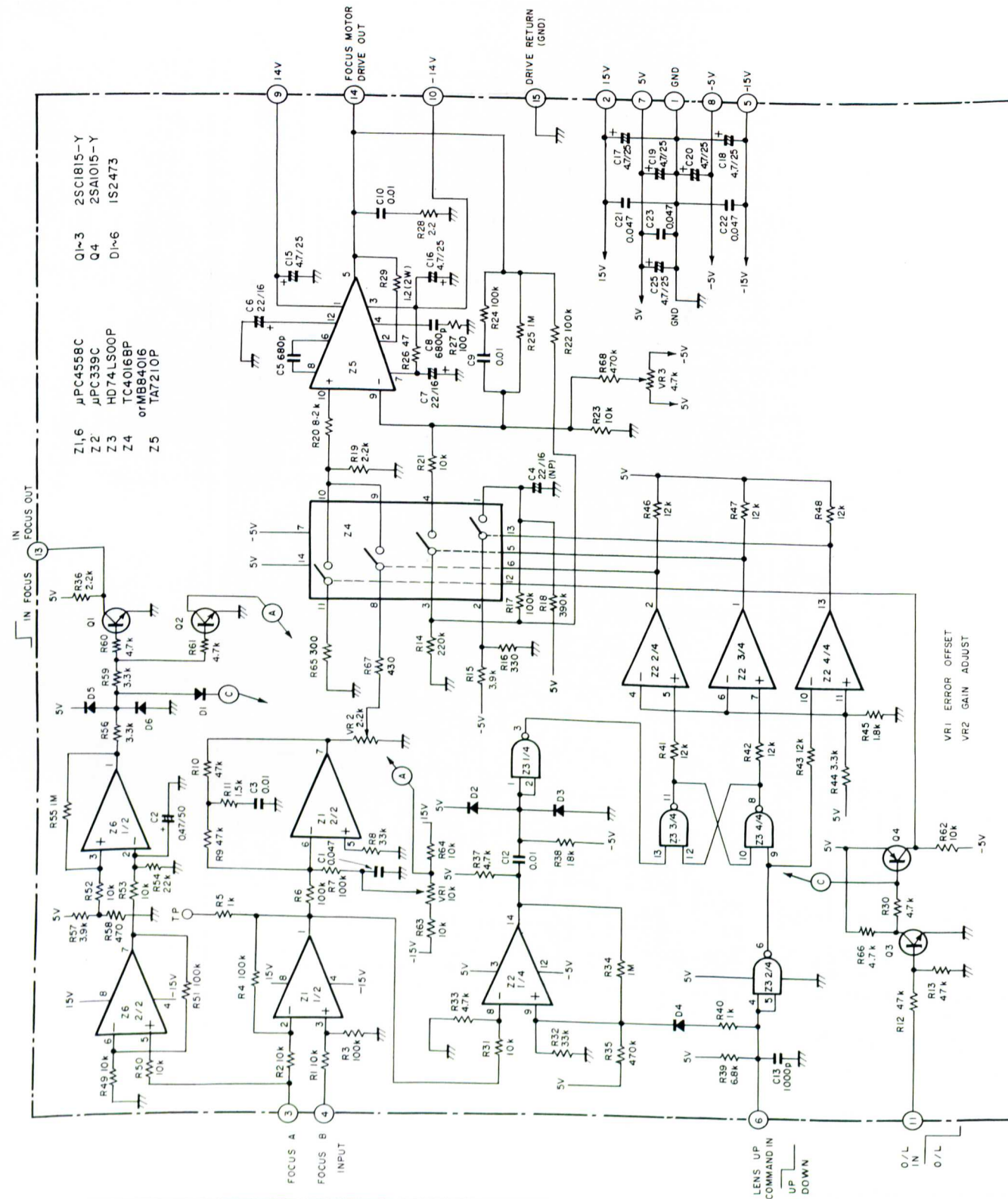
Movement of Beam on the Transparent Jig

2.4 ADJUSTMENT OF OPTICAL SYSTEM TYPE 4

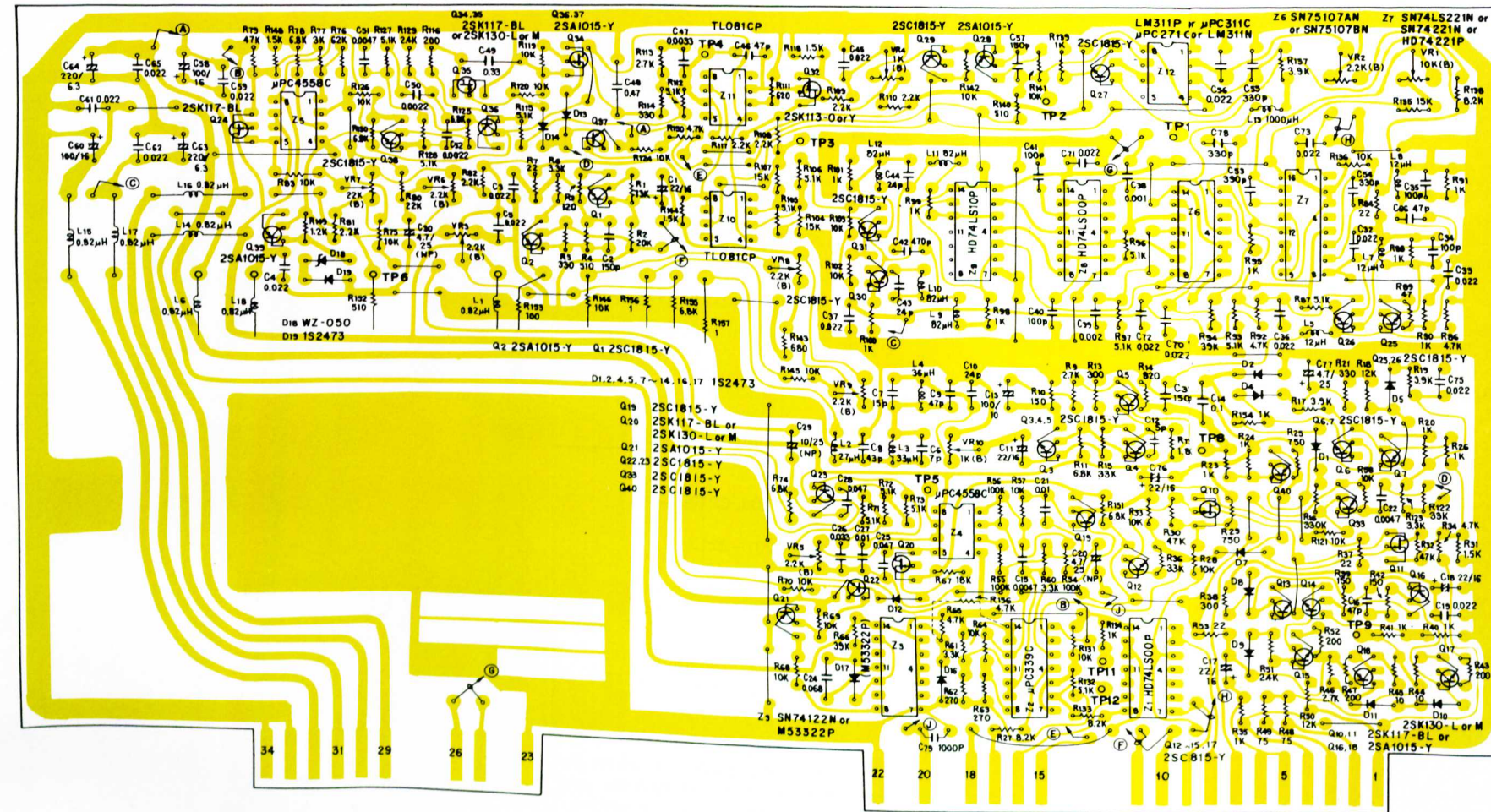
Attach the transparent jig to the wall of the platform, adjust the height of the mobile reflection mirror, and focus the beam onto the transparent jig prior to mounting the cylindrical lens assembly. Either mark the height with several lines, or adjust the height of the jig to that of the beam. Next mount the cylindrical lense assembly, and readjust the height of the mobile reflection mirror, adjusting the height of the cylindrical lens so that the zero order beam is focussed onto the transparent jig at the same height as before.



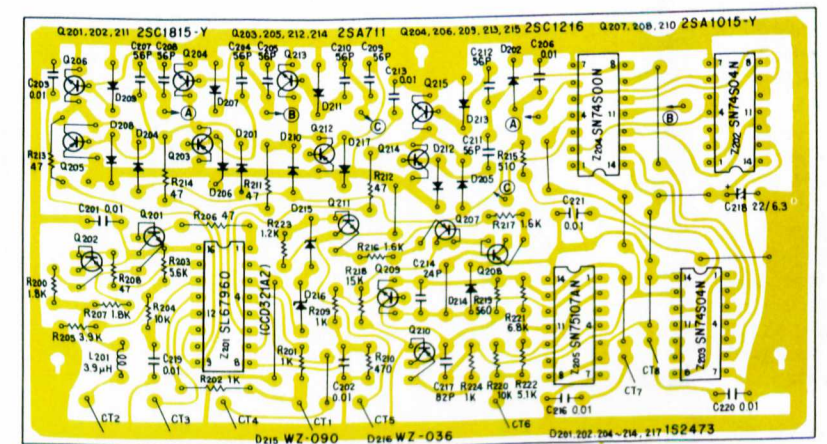
2.5 FOCUS SERVO ASSEMBLY (VWS-001) (FOCS)



VWS-009



VWS-010



Parts List of VWW-005 (VWS-009)

SEMICONDUCTORS

Part No.	Symbol & Description
HD74LS00P	Z1, Z8
μPC339C	Z2
M53322P	Z3
(SN74122N)	Z3
μPC4558C	Z4, Z5
SN75107AN	Z6
SN74221N	Z7
HD74LS00P	Z8
HD74LS10P	Z9
TL081CP	Z10, Z11
LM311P	Z12
2SC1815Y	Q1, Q3—Q7, Q12—Q15, Q17, Q19, Q22, Q23, Q25—Q27, Q29—Q31, Q33, Q38
2SA1015Y	Q2, Q16, Q18, Q21, Q28, Q36, Q37, Q39
2SK117BL	Q10, Q11, Q20, Q24, Q34, Q35
2SK113Y or O	Q32
1S2473	D1, D2, D4, D5, D7—D14, D16, D19
WZ-050	D18

CAPACITORS

Part No.	Symbol & Description
CEA 220P 16	C1, C11, C17, C18, C76
CCDSL 151J 50	C2, C31, C57
CKDYF 223Z 50	C3—C5, C19, C32, C33, C36, C37, C45, C59, C61, C62, C65, C70—72 C73, C75
CCDSL 070D 50	C6
CCDSL 150J 50	C7
CCDCH 430J 50	C8
CCDSL 470J 50	C9, C16, C46, C66
CCDCH 240J 50	C10, C43, C44
CCDSL 050C 50	C12
CEA 101P 10	C13
CQMA 104K 50	C14
CQMA 472K 50	C15, C22, C51
CEA 4R7M 25 NP	C20, C30
CQMA 103K 50	C21, C27
CQMA 223K 50	C24
CQMA 473K 50	C25, C28
CQMA 333K 50	C26
CEA 100M 16 NP	C29
CCDSL 101J 50	C34, C35
CKDYB 102K 50	C38, C39, C79
CKDYB 471K 50	C42
CQMA 332K 50	C47
VCE-001	C48
VCE-002	C49
CQMA 222K 50	C50, C52

CQSH 391J 50	C53
CQSH 331J 50	C54
CCDSL 331J 50	C55, C78
CEA 101P 16	C58, C60
CEA 221P 6R3	C63, C64
CEA 4R7P 25	C77

Note: When ordering resistors, convert the resistance value into code form, and then rewrite the part no. as before.

RESISTORS

Part No.	Symbol & Description
RD¼VS □□□J	R1—R7, R9—R21, R23—R58 R60—R84, R86—R145 R148—R151, R154
RD¼PS □□□J	R146, R152, R153, R155—R157
VCP-007	VR1
VCP-005	VR2
VCP-025	VR3, VR5—VR9
VCP-004	VR4
VCP-024	VR10

COILS

Part No.	Symbol & Description
VTF-010	L1, L6, L14—L18
VTL-053	L2
VTL-054	L3
VTL-055	L4
VTL-024	L5, L7, L8
VTL-034	L9—L12
VTL-047	L13

(VWS-010)

SEMICONDUCTORS

Part No.	Symbol & Description
SL67960	Z201
SN74S04N	Z202, Z203
SN74S00N	Z204
SN75107AN	Z205
2SC1815Y	Q201, Q202, Q211
2SA711	Q203, Q205, Q212, Q214
2SC1216	Q204, Q206, Q209, Q213, Q215
2SA1015Y	Q207, Q208, Q210
1S2473	D201, D202, D204—D214, D—217
WZ-090	D215
WZ-036	D216

CAPACITORS

Part No.	Symbol & Description
CEA 470P 16	C80
CKDYF 103Z 50	C201—C203, C206, C213, C216, C219—C223
CCDSL 560J 50	C204, C205, C207—C212
CCDCH 240J 50	C214
CCDSL 820J 50	C217
CSZAH 220M 6R3	C218

Note: When ordering resistors, convert the resistance value into code form, and then rewrite the part no. as before.

RESISTORS

Part No.	Symbol & Description
RD $\frac{1}{2}$ PS □□□J	R202, R206, R211—R214, R218
RD $\frac{1}{2}$ VS □□□J	R200, R201, R203—R205, R207—R210 R215—R224

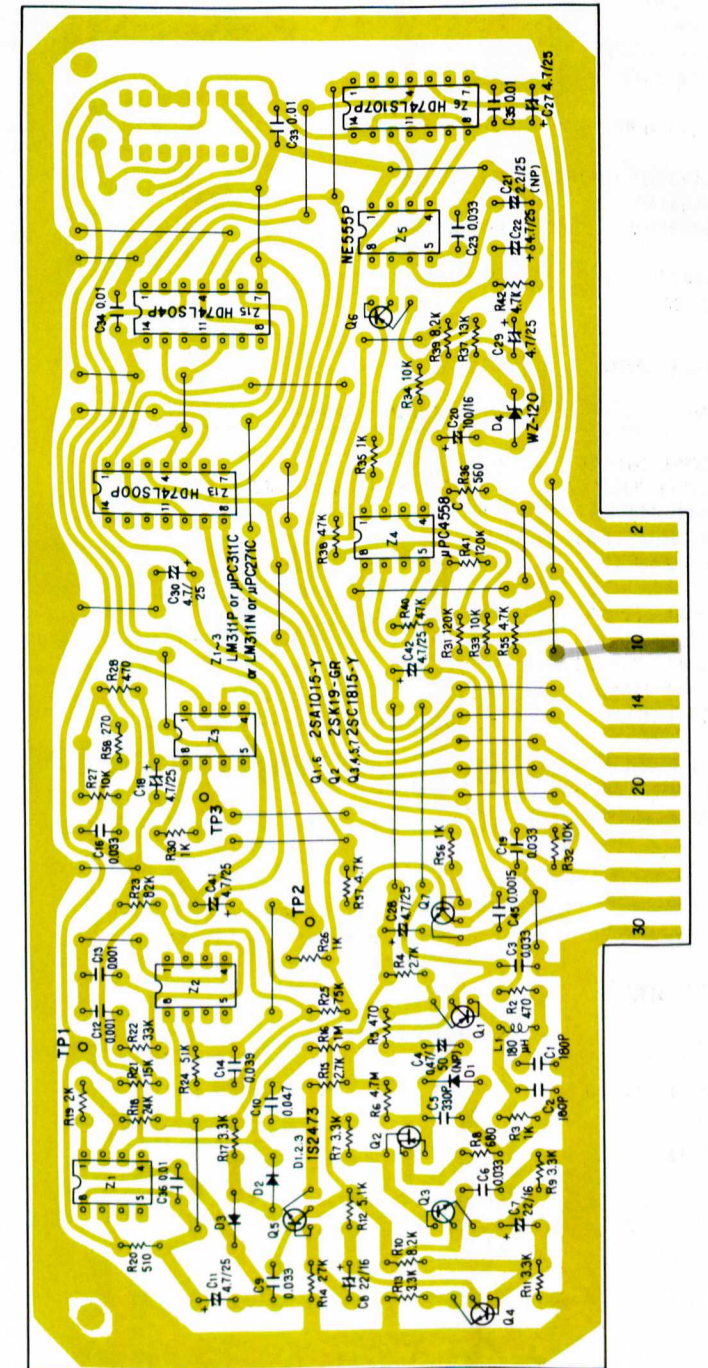
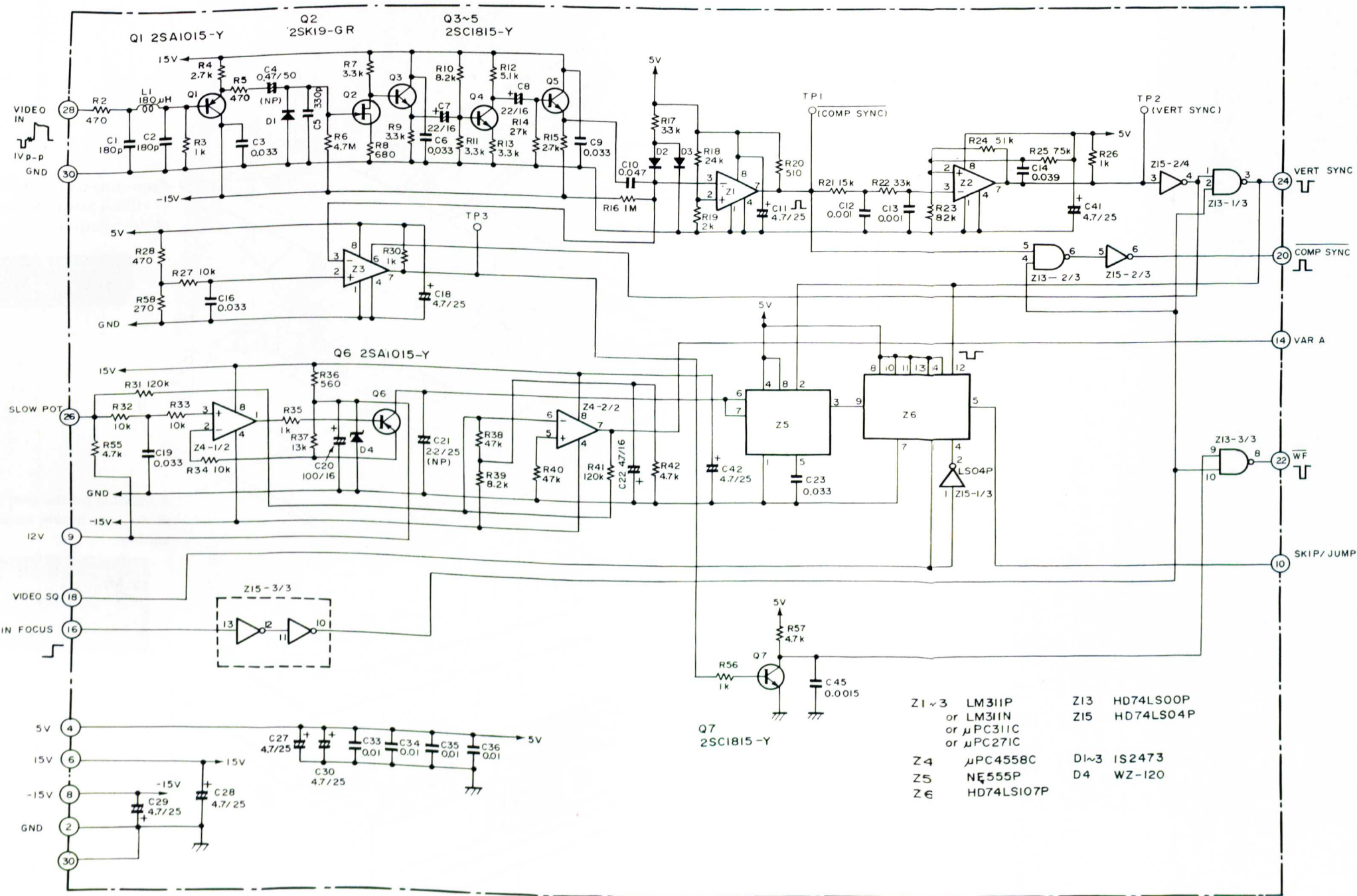
COILS

Part No.	Symbol & Description
VTL-018	L201

OTHERS

Part No.	Symbol & Description
VKH-005	IC socket
VTH-001	FB1—FB3

2.7 STOP MOTION ASSEMBLY (VWG-010) (STPM)



Parts List of STPM assembly

SEMICONDUCTORS

Part No.	Symbol & Description
LM311P	Z1—Z3
μPC4558C	Z4
NE555P	Z5
HD74LS107P	Z6
HD74LS00P	Z13
HD74LS04P	Z15
2SA1015Y or O	Q1, Q6
2SK19GR	Q2
2SC1815Y	Q3—Q5, Q7
1S2473	D1—D3
WZ120	D4

CAPACITORS

Part No.	Symbol & Description
CCDSL 181J 50	C1, C2
CKDYF 333Z 50	C3, C6, C9, C16, C19, C23
CEAR 47M 50 NP	C4
CCDSL 331J 50	C5
CEA 220P 16	C7, C8
CQMA 473K 50	C10
CEA 4R7P 25	C11, C18, C22, C27—C30, C41, C42
CQMA 102K 50	C12, C13
CQMA 393K 50	C14
CEA 101P 16	C20
CEA2R2M 25 NP	C21
CKDYB 103K 50	C33—C36
CQMA 152K 50	C45

Note: When ordering resistors, convert the resistance value into code form, and then rewrite the part no. as before.

RESISTORS

Part No.	Symbol & Description
RD%VS □□□J	R2—R28, R30—R42, R55—R58

OTHERS

Part No.	Symbol & Description
VTL-038	L1

3. SAFETY

This unit is designed to permit service without the necessity of direct laser beam exposure. The service technician should exercise the precaution necessary to avoid any direct laser beam.

Before returning this product to the customer

make sure all shields, barriers, and covers are in place and the interlock system of the hood is functioning properly. Attaching place of caution labels is based on Federal Law (HEW regulation).

Appearing on the external surface of the rear panel, the mech panel and the bottom cover.

CAUTION

TO PREVENT ELECTRIC SHOCK, DO NOT REMOVE COVER. THERE ARE NO USER-SERVICEABLE PARTS INSIDE. REFER ALL SERVICING TO QUALIFIED SERVICE PERSONNEL.

Appearing on the shield cover of HEDA assembly and the optical platform cover.

DANGER
LASER RADIATION WHEN OPEN
AVOID DIRECT EXPOSURE TO BEAM
CAUTION
HAZARDOUS ELECTROMAGNETIC
RADIATION WHEN OPEN

Appearing on the dust cover of the laser power supply assembly.

DANGER
HIGH VOLTAGE

